

MUROHARA - 10/665,420
Client/Matter: 008312-0306032

REMARKS

Claims 1-7 are currently pending in this application. By this Amendment, the specification and claims 1, 2, 3, 6 and 7 are amended. No new matter is added. Support for the amendments to the claims is found in the specification beginning on page 5, lines 1-11 through page 6 on lines 10-13. Reconsideration in view of the above-identified amendments and the following remarks is respectfully requested.

Claims 1-7 were rejected under 35 U.S.C. §102(e) over U.S. Patent No. 6,719,206 to Bashan et al. ("Bashan"). This rejection is respectfully traversed.

Bashan discloses a data transaction card and a method of manufacturing the same. The data transaction card has an interface for bi-directional contactless communication. The data card includes a chip carrier module 10 having a substrate 11 located within a cavity 12 in a support medium 20. The substrate 11 provides a foundation for an integrated circuit 30 and a coil antenna 40. Both the circuit 30 and coil antenna 40 are mounted on a lower surface 45 of the substrate 11. The antenna 40 surrounds the circuit 30. The antenna 40 is etched or deposited onto the substrate 11, which is a printed circuit board. Following the formation of the antenna 40, the circuit 30 is mounted and secured to the substrate 11. The antenna 40 and the circuit 30 are then electrically connected and sealed to form the chip carrier module 10. The module 10 is inserted into a cavity 12 and glued to secure the module 10 to the support medium 20.

By contrast, amended claim 1 is directed to a method of mounting a combination-type IC card. The IC card has a tuning circuit including an antenna and a tuning capacitor for trimming on a first substrate. The IC card has an IC module that is electrically connected to the tuning circuit and mounted on the first substrate. The IC module includes an LSI, and a contact portion connected to an external device. The LSI and the contact portion are mounted

MUROHARA - 10/665,420
Client/Matter: 008312-0306032

on a second substrate. The IC card also include a resonance circuit including the tuning circuit and the LSI. The method of mounting a combination-type IC card includes a milling step of making a hole in the first substrate in which the IC module is mounted. The method further includes a trimming step of setting a resonance frequency to one of various resonance frequencies by selectively cutting a signal line which connects the tuning capacitor for trimming and the antenna. The method also includes an implanting step of mounting the IC module into the hole formed in the first substrate after the trimming step.

Bashan does not disclose the subject matter of amended claim 1. Bashan does not disclose an antenna and an LSI that are mounted on separate substrates. Both the antenna 40 and the circuit 30 are mounted on the same substrate 11. Bashan does not disclose milling a hole in the first substrate, which contains the antenna and the tuning capacitor. Instead, Bashan provides a cavity 12 in a support medium 20 which receives the chip carrier module 10. Furthermore, Bashan does not disclose, teach or suggest setting the resonance frequency by selectively cutting a signal line. Finally, Bashan does not disclose mounting the IC module, which includes the LSI into the hole in the first substrate after selectively cutting the signal line. Accordingly, applicant respectfully submits that Bashan does not disclose, teach or suggest the subject matter of amended claim 1. Claims 2-5 depend from claim 1 and are allowable over Bashan for at least the same reasons. Furthermore, claims 2-5 further describe the trimming step, which is not disclosed by Bashan. Reconsideration and withdrawal of the rejection of claims 1-5 are respectfully requested.

By contrast, amended claim 6 is directed to a combination-type card. The card includes an antenna card has a tuning circuit including an antenna and at least one tuning capacitor. The antenna has antenna terminals and is mounted on a first substrate. At least one tuning condenser is connected to the antenna and the antenna terminals via a signal line. The card also includes an IC module that is electrically connected to the tuning circuit. The

MUROHARA -- 10/665,420
Client/Matter: 008312-0306032


IC module is mounted on the first substrate. The IC module also includes an LSI, a contact portion connected to an external device, and antenna-connecting terminals. The LSI, the contact portion and the antenna-connecting terminals are mounted on a second substrate. The antenna-connecting terminals of the IC module and the antenna of the antenna card are electrically connected, thereby configuring a resonant circuit including the tuning circuit and the LSI. The resonance frequency of the resonant circuit is adjusted to one of various resonance frequencies by selectively cutting the signal lines.

Bashan does not disclose the subject matter of amended claim 6. As discussed above, Bashan discloses a card having a substrate 11, which provides the foundation for circuit 30 and the coil antenna 40. The substrate 11 is mounted in a cavity 12 in a support medium 20. Bashan does not disclose an antenna mounted on a first substrate and an LSI and antenna connecting terminals located on a second substrate. Bashan also fails to disclose adjusting the resonant circuit by selectively cutting the signal lines. Accordingly, applicant respectfully submits that Bashan does not disclose, teach or suggest the subject matter of amended claim 6. Claim 7 depends from claim 6 and is allowable over Bashan for at least the same reasons. Furthermore, Bashan does not disclose the claimed hole in the first substrate or cutting a signal line when the hole is made. Reconsideration and withdrawal of the rejection of claims 6-7 are respectfully requested.

MUROHARA - 10/665,420
Client/Matter: 008312-0306032

Applicant respectfully submit that the claims define subject matter that is patentable over the prior art cited of record. It is respectfully submitted that the application is in condition for allowance. Should further issues require resolution prior to allowance, the Examiner is requested to telephone applicant's undersigned attorney at the number below. Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,
PILLSBURY WINTHROP LLP


GLENN T. BARRETT
Reg. No. 38705
Tel. No. 703 905-2011
Fax No. 703 905-2500

Date: October 26, 2004
P.O. Box 10500
McLean, VA 22102
(703) 905-2000